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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* NURHAN PINAR TUTUNCU, SONIA HARTUNIAN-SOWA,  
JULIE A. BRATTON, KEVIN J. STANTON, and JEAN LEE

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Appeal 2010-001498  
Application 09/825,992  
Technology Center 1600

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Before DONALD E. ADAMS, MELANIE L. McCOLLUM, and  
JEFFREY N. FREDMAN, *Administrative Patent Judges*.

FREDMAN, *Administrative Patent Judge*.

DECISION ON APPEAL<sup>1</sup>

This is an appeal under 35 U.S.C. § 134 involving claims to a confectionary product. The Examiner rejected the claims as obvious. We have jurisdiction under 35 U.S.C. § 6(b). We affirm.

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<sup>1</sup> The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, or for filing a request for rehearing, as recited in 37 C.F.R. § 41.52, begins to run from the “MAIL DATE” (paper delivery mode) or the “NOTIFICATION DATE” (electronic delivery mode) shown on the PTOL-90A cover letter attached to this decision.

*Statement of the Case*

*The Claims*

Claims 1-5, 7, 8, 10, 11, 13-21, 23, 24, and 28-32 are on appeal. Claims 1 and 17 were separately argued in the Cherukuri and Le obviousness rejection. Claim 17 was not separately argued in the Bealin-Kelly and Hanke obviousness rejection. The remaining claims have not been argued separately and therefore stand or fall together. 37 C.F.R. § 41.37(c)(1)(vii). Claims 1 and 17 are representative and can be found in the Claims Appendix.

*The issues*

- A. The Examiner rejected claims 1-5, 7, 8, 10, 11, 13, 14, 17, 20, 23, 24, and 29-32 under 35 U.S.C. § 103(a) as obvious over Cherukuri<sup>2</sup> and Le<sup>3</sup> (Ans. 4-8).
- B. The Examiner rejected claims 18 and 19 under 35 U.S.C. § 103(a) as obvious over Cherukuri, Le, and Aldrich<sup>4</sup> (Ans. 8).
- C. The Examiner rejected claims 15, 16, 21, and 28 under 35 U.S.C. § 103(a) as obvious over Cherukuri, Le, and Hughes<sup>5</sup> (Ans. 9-10).
- D. The Examiner rejected claims 1-5, 7, 8, 13-18, 23, 29, and 31 under 35 U.S.C. § 103(a) as obvious over Bealin-Kelly<sup>6</sup> and Hanke<sup>7</sup> (Ans. 10-11).

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<sup>2</sup> Cherukuri et al., US 5,284,659, issued Feb. 8, 1994.

<sup>3</sup> Le et al., WO 99/59427 A1, published Nov. 25, 1999.

<sup>4</sup> Aldrich, US 4,517,205, issued May 14, 1985.

<sup>5</sup> Hughes et al., US 6,004,538, issued Dec. 21, 1999.

<sup>6</sup> Bealin-Kelly, US 6,306,429 B1, issued Oct. 23, 2001.

<sup>7</sup> Hanke, WO 97/06695 A1, published Feb. 27, 1997.

E. The Examiner rejected claims 20 and 21 under 35 U.S.C. § 103(a) as obvious over Bealin-Kelly, Hanke, and “NIH publication”<sup>8</sup> (Ans. 11-12).

F. The Examiner rejected claim 19 under 35 U.S.C. § 103(a) as obvious over Bealin-Kelly, Hanke, and Klacik<sup>9</sup> (Ans. 13).

A. *35 U.S.C. § 103(a) over Cherukuri and Le*

The Examiner finds that “a skilled artisan would have been motivated to utilize an acidulant in Cherukuri’s example as the bio-effecting agent in place of the breath freshener if one desired to treat xerostomia and dry mouth or reduce plaque on the teeth” (Ans. 7). The Examiner also finds that

one would have been motivated to utilize an acidulant in the shell portion since Cherukuri teaches the shell portion provides the release of the first flavor (the rapid release portion) and thus a skilled artisan would have been motivated to utilize an acidulant in the shell portion since Le teaches acidulents are conventionally utilized to improve and enhance the release of the flavor.

(*Id.*)

Appellants contend that “the specific composition examples in Cherukuri are center-filled products, and the patent refers to the regions as ‘Shell’ and ‘Core.’ . . . The Office Action fails to articulate a reason why one of ordinary skill in the art would have started with an embodiment shown in Figs. 5 and 6” (App. Br. 12). Appellants contend that

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<sup>8</sup> The Examiner did not include a copy of this reference in the official record in e-DAN.

<sup>9</sup> Klacik et al., US 6,099,880, issued Aug. 8, 2000.

the combination of an oral comfort ingredient and an acidulant in discrete regions is used to obtain a salivation effect. The Examiner has not addressed whether a salivation effect is an obvious result of the combinations she applies. For example the Examiner does not allege that increased oral manipulation of the product in the mouth, as described in claim 24, is an obvious result. Therefore, the Examiner has not stated a rationale that makes the claimed invention obvious.

(App. Br. 14.)

Appellants contend that the “affidavit of Dr. Moss attests to what one of ordinary skill in the art would glean from the Le reference: that acid is not an antigingivitis agent” (*id.* at 16). Appellants contend that “[a]ccording to Cherukuri, both regions contain flavor. There is no reason to concentrate acid in one region and not the other. According to Le, acid is distributed throughout the product. None of the references applied by the Examiner suggest segregating the acidulant from an oral comfort ingredient” (*id.* at 17).

The issue with respect to this rejection is: Does the evidence of record support the Examiner’s conclusion that incorporation of an acid into a salivation region of a confectionary product would have been obvious?

*Findings of Fact*

1. Cherukuri teaches “confectionary tablets with both instant and timed delivery to the oral cavity of taste-affecting ingredients such as flavors, sweeteners, and mixtures thereof in compressed tablets” (Cherukuri, col. 1, ll. 11-14).

2. Cherukuri teaches

a first flavor ingredient intimately bound in a hydrophilic composition for instantaneous delivery of the first ingredient to the oral cavity. The first flavor ingredient is included in either the first phase, the second phase, or both first and second phases. . . .

The present invention also includes second flavor ingredient encapsulated in a hydrophobic composition along with a bioadhesive to provide timed delivery of the second ingredient to the oral cavity as well as adhesion of the confectionery tablet to the moist areas of the oral cavity. This encapsulated flavor ingredient can be included in either the first phase, the second phase, or both the first and second phases so that selected flavor-delivery sequences can be provided.

(Cherukuri, col. 2, l. 54 to col. 3, l. 5.)

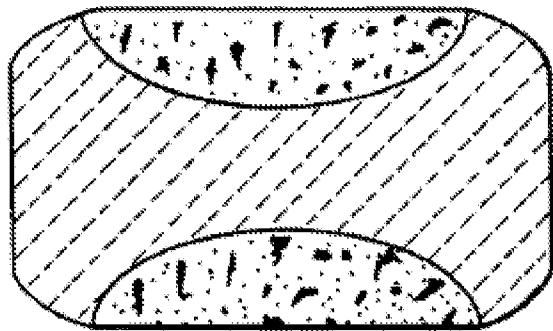
3. The Examiner finds that Cherukuri teaches a shell and core where the shell region comprises a liquid flavor and the “shell region reads on instant ‘salivation region’ since this region contains the bio-effecting agent (the breath freshener)” (Ans. 5).

4. Cherukuri teaches that the core can be composed of soybean oil (*see* Cherukuri, col. 12, ll. 36-38).

5. Cherukuri teaches diluents in the core “may include lactose . . . sorbitol, mannitol, polydextrose . . . xylitol, other sugar alcohols and sugar” (Cherukuri, col. 8, ll. 59-62).

6. Figure 6 of Cherukuri is reproduced below:

## FIG-6



“FIG. 6 shows another embodiment . . . wherein the first phase is generally the middle and circumferential portion and the second phase has been fixed on either sides” (Cherukuri, col. 11, ll. 39-42).

7. Cherukuri teaches that “the bioadhesive may be encapsulated with a bio-effecting agent such as breath fresheners, breath deodorants, antigingivitis agents and combinations thereof” (Cherukuri, col. 7, ll. 32-35).

8. Le teaches that “[a]cidulents or acids are used in comestible and dentrifice products for a variety of reasons. For example, acid is taught for use in chewing gum to increase saliva production for the treatment of xerostomia or dry mouth . . . Acid has also been used in chewing gum to soften plaque on teeth” (Le 1, ll. 18-22).

9. Le teaches that “acidulants that may be co-processed with the water-soluble crystalline compound and added to the products of the present invention are inorganic and organic acids or salts thereof” (Le 5, ll. 13-15).

*Principles of Law*

“The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.”

*KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 416 (2007). “If a person of ordinary skill can implement a predictable variation, § 103 likely bars its patentability.” *Id.* at 417. Moreover, an “[e]xpress suggestion to substitute one equivalent for another need not be present to render such substitution obvious.” *In re Fout*, 675 F.2d 297, 301 (CCPA 1982). As noted by the Court in *KSR*, “[a] person of ordinary skill is also a person of ordinary creativity, not an automaton.” 550 U.S. at 421.

*Analysis*

*Claim 1*

Cherukuri teaches a hard candy confectionary product with two regions, a shell and a core, each having a surface on the exterior of the product (see FF 1-3, 6). Cherukuri teaches that the core region of the confectionary product may be composed of lipids including soybean oil (FF 4). Cherukuri teaches that the shell region comprises “a bio-effecting agent such as breath fresheners, breath deodorants, antigingivitis agents and combinations thereof” (Cherukuri, col. 7, ll. 32-35; FF 7).

Le teaches that “[a]cidulents or acids are used in comestible and dentrifice products for a variety of reasons. For example, acid is taught for use in chewing gum to increase saliva production for the treatment of xerostomia or dry mouth . . . Acid has also been used in chewing gum to soften plaque on teeth” (Le 1, ll. 18-22; FF 8).

While the Examiner acknowledges that Cherukuri does not teach an acidulant as a bio-effecting agent (*see* Ans. 6), the Examiner reasons that “a skilled artisan would have been motivated to utilize an acidulent in Cherukuri’s example as the bio-effecting agent in place of the breath freshener if one desired to treat xerostomia and dry mouth or reduce plaque on the teeth” (Ans. 7).

We agree with the Examiner that it would have been obvious to incorporate the acidulent of Le as a bioeffecting agent for xerostemia or plaque reduction into the candy of Cherukuri since Le teaches that acidulents serve these purposes (FF 8) and since Cherukuri teaches the use of bio-effecting agents in the hard candy (FF 7). Such a combination is merely a “predictable use of prior art elements according to their established functions.” *KSR*, 550 U.S. at 417.

Appellants contend that “the specific composition examples in Cherukuri are center-filled products, and the patent refers to the regions as ‘Shell’ and ‘Core.’ . . . The Office Action fails to articulate a reason why one of ordinary skill in the art would have started with an embodiment shown in Figs. 5 and 6” (App. Br. 12).

We are not persuaded. Cherukuri teaches that “FIG. 6 shows another embodiment . . . wherein the first phase is generally the middle and circumferential portion and the second phase has been fixed on either sides” (Cherukuri, col. 11, ll. 39-42; FF 6). This embodiment is no less obvious than other embodiments disclosed by Cherukuri, since an invention may be suggested by the prior art and therefore obvious, even if inferior, less desirable, or simply alternative to embodiments that would be made by

following other prior art suggestions. (*See In re Fulton*, 391 F.3d 1195, 1200 (Fed. Cir. 2004) (A “finding that the prior art as a whole suggests the desirability of a particular combination need not be supported by a finding that the prior art suggests that the combination claimed by the patent applicant is the preferred, or most desirable, combination.”))

Appellants contend that

the combination of an oral comfort ingredient and an acidulent in discrete regions is used to obtain a salivation effect. The Examiner has not addressed whether a salivation effect is an obvious result of the combinations she applies. For example the Examiner does not allege that increased oral manipulation of the product in the mouth, as described in claim 24, is an obvious result. Therefore, the Examiner has not stated a rationale that makes the claimed invention obvious.

(App. Br. 14.)

We are not persuaded. The Examiner reasons that “a skilled artisan would have been motivated to utilize an acidulent in Cherukuri’s example as the bio-effecting agent in place of the breath freshener if one desired to treat xerostomia and dry mouth or reduce plaque on the teeth” (Ans. 7). Thus, the Examiner has provided a reason, where the applicable logic of combination is that the ordinary artisan would have been motivated to substitute or combine bio-effecting agents known to function in confectionary products, and that the acidulents known from Le to treat xerostomia and dry mouth or reduce plaque on the teeth would reasonably have been combined with the confectionary product of Cherukuri (*id.*).

Appellants contend that the “affidavit of Dr. Moss attests to what one of ordinary skill in the art would glean from the Le reference: that acid is not

an antigingivitis agent" (App. Br. 16). Appellants contend that "[a]ccording to Cherukuri, both regions contain flavor. There is no reason to concentrate acid in one region and not the other. According to Le, acid is distributed throughout the product. None of the references applied by the Examiner suggest segregating the acidulant from an oral comfort ingredient" (*id.* at 17).

We can agree with Appellants on both of these points, but not find them persuasive in overcoming the obviousness rejection. We can fully credit the Moss Declaration and agree that the acidulents of Le are not shown to be antigingivitis agents. We might also agree with Appellants that there is "no reason to concentrate acid in one region and not the other" (*id.*), in spite of Cherukuri's teaching that the "encapsulated flavor ingredient can be included in either the first phase, the second phase, or both the first and second phases so that selected flavor-delivery sequences can be provided" (Cherukuri, col. 3, ll. 2-5; FF 2).

Neither of these arguments overcomes the basic reasoning of the Examiner that "a skilled artisan would have been motivated to utilize an acidulant in Cherukuri's example as the bio-effecting agent in place of the breath freshener if one desired to treat xerostomia and dry mouth or reduce plaque on the teeth" (Ans. 7). This reasoning applies even if the acidulant has only anti-plaque and xerostomia treating properties (FF 8) and lacks antigingivitis properties and would not be concentrated for flavor reasons into either region.

*Claim 17*

Appellants contend that the Examiner rejected claim 17 without identifying where Cherukuri or Le teach the various steps of the claim (App. Br. 18).

We are not persuaded. Le teaches that “acidulants that may be co-processed with the water-soluble crystalline compound and added to the products of the present invention are inorganic and organic acids or salts thereof” (Le 5, ll. 13-15; FF 9). Cherukuri teaches the process of formation of the remainder of the hard candy (*see* Cherukuri, col. 10, l. 40 to col. 11, l. 27).

*Conclusion of Law*

The evidence of record supports the Examiner’s conclusion that incorporation of an acid into a salivation region of a confectionary product would have been obvious.

*B. 35 U.S.C. § 103(a) over Cherukuri, Le, and Aldrich*

Appellants contend that “one of ordinary skill in the art, starting from the disclosure of Cherukuri and Le, would have not have been directed to formulate a hard candy according to the method of Aldrich, using the ingredients of Cherukuri and Le” (App. Br. 18-19).

We are not persuaded. The Examiner reasoned that it would have been obvious to combine the teachings of Cherukuri, Le, and Aldrich to “simultaneously deposit the two distinct regions in a mold cavity. One would have been motivated to do so since Aldrich teaches this it is an efficient method that is easily adaptable for commercial production of candies comprising two-components such as a shell portion and core

portion" (Ans. 8). Appellants have not provided a reason or argument to rebut the Examiner's sound, fact based, obviousness argument, but simply contends that the combination of Cherukuri, Le, and Aldrich is not obvious.

*C. 35 U.S.C. § 103(a) over Cherukuri, Le, and Hughes*

The Examiner finds that "a skilled artisan would have been motivated to specifically utilize menthol as the flavorant in the shell portion for its various advantageous functions. Moreover, one would have specifically utilize[d] menthol in the shell area specifically since the shell area comprises the bioeffecting agents" (Ans. 9-10).

The Examiner provides sound fact-based reasoning for combining Cherukuri, Le, and Hughes. As Appellants do not identify any material defect in the Examiner's reasoning, and only argue the underlying rejection of Cherukuri and Le which we affirmed above, we affirm this rejection for the reasons stated by the Examiner.

*D. 35 U.S.C. § 103(a) over Bealin-Kelly and Hanke*

The Examiner finds that "Bealin-Kelly teaches that various configurations may be utilized including a centre-filled drop that provides a sequential release of the compositions or a configuration that provides differential release profiles" (Ans. 10). The Examiner finds that Hanke teaches "a confectionary product comprising a coolant composition and flavoring composition in separate and distinct regions. The composition may take various form[s] including hard candies wherein the distinct regions are in separate layers" (*id.* at 11). The Examiner finds it obvious to "utilize a configuration wherein the respective compositions are in separate layers rather than a 'centre-filled drop'" (*id.*).

Appellants contend that “[e]ven the layered configuration of Hanke delivers different release profiles to the ingredients (*i.e.*, sequential release profiles) and does not produce the results of the claimed invention . . . . Therefore, it would not have been obvious to arrive at the claimed invention based on the disclosure of either Bealin-Kelly or Hanke” (App. Br. 22). Appellants contend that “the confectionery product according to the claims is not obvious in view of Bealin-Kelly and Hanke because those references are directed to a cough/cold remedy, whereas the claimed invention is directed to a xerostomia treatment” (*id.*).

The issue with respect to this rejection is: Does the evidence of record support the Examiner’s conclusion that utilizing a configuration with separate layers where each layer has a surface on the exterior of the product as required by claim 1 would have been obvious?

*Findings of Fact*

10. Bealin-Kelly teaches “a throat drop comprising a cooling composition and a warming composition. The compositions are in distinct and discrete regions of the drop, preferably in the shell and filling respectively of a centre-filled drop” (Bealin-Kelly, col. 2, ll. 11-15).

11. Bealin-Kelly teaches that the shell is preferably a hard candy and that a “suitable sugar base for a hard candy shell comprises about 30% to about 85% glucose syrup and from about 15% to about 70% sucrose. Alternatively, a sugar-free base can be used for the shell” (Bealin-Kelly, col. 6, ll. 2-9).

12. The Examiner finds that Bealin-Kelly teaches a candy casing with “49.37% sucrose, 49.37% glucose syrup, 0.27% lemon oil, 0.08%

menthol (cooling compound), and 0.91% citric acid (acidulant)” (Ans. 10; *see* Bealin-Kelly, col. 6, ll. 50-60).

13. Bealin-Kelly teaches that the “liquid filling was made by adding a premix of the lecithin, colour solution, flavour oils, cooling and/or warming agents to a mixture of the high fructose corn syrup” (Bealin-Kelly, col. 6, ll. 40-44).

14. Hanke teaches that the “confectionary product consists of just one coolant composition and one flavour composition. The distinct and discrete regions can be separate layers . . . In which case, preferably the confectionary product is moulded with just two parts, one being the coolant composition, the other the flavour composition” (Hanke 3).

15. Hanke teaches that in “an alternatively preferred embodiment the confectionary product can have an outer coating of either the coolant or flavour composition” (Hanke 3).

#### *Analysis*

The Examiner finds that Hanke teaches “a coolant composition and flavoring composition in separate and distinct regions. The composition may take various form[s] including hard candies wherein the distinct regions are in separate layers” (Ans. 11). The Examiner reasons that it “would have been obvious to one of ordinary skill in the art at the time the invention was made [that] Bealin-Kelly and [Hanke] . . . utilize a configuration wherein the respective compositions are in separate layers rather than a ‘centre-filled drop’” (*id.*). The Examiner contends that “the instant configuration is merely a design choice” (*id.* at 21).

We agree with the Examiner that if there are just two regions where one does not necessarily encapsulate the other, a part of each region would necessarily be present on the surface. In particular, where Hanke teaches that a confectionary molded from two parts is one embodiment (FF 14) and that an alternative embodiment is the outer coating and centre filled drop (FF 15), it is reasonable to interpret Hanke as teaching that the molded embodiment differs from the outer coating and centre-fill drop (FF 14-15).

Appellants contend that “[e]ven the layered configuration of Hanke delivers different release profiles to the ingredients (*i.e.*, sequential release profiles) and does not produce the results of the claimed invention . . . . Therefore, it would not have been obvious to arrive at the claimed invention based on the disclosure of either Bealin-Kelly or Hanke” (App. Br. 22).

We are not persuaded. Claim 1 simply requires two regions as described where the acidulant is not uniformly distributed and where both regions each have a surface on the exterior of the product. Bealin-Kelly teaches a confectionary product with an acidulant present only in one region (FF 12). For the reasons already given, we agree with the Examiner that the formulation where both regions have a surface on the exterior of the product is obvious over the disclosure of Hanke (FF 14-15).

Appellants contend that “the confectionery product according to the claims is not obvious in view of Bealin-Kelly and Hanke because those references are directed to a cough/cold remedy, whereas the claimed invention is directed to a xerostomia treatment” (App. Br. 22).

We are not persuaded since claim 1 is drawn to a “confectionary product.” Claim 1 lacks any method steps and the “xerostomia” treatment

simply represents an intended use limitation which is not even found in the claim. *See In re Schreiber*, 128 F.3d 1473, 1477 (Fed. Cir. 1997) (“It is well settled that the recitation of a new intended use for an old product does not make a claim to that old product patentable.”)

*Conclusion of Law*

The evidence of record supports the Examiner’s conclusion that utilizing a configuration with separate layers where each layer has a surface on the exterior of the product as required by claim 1 would have been obvious.

*E. 35 U.S.C. § 103(a) over Bealin-Kelly, Hanke, and “NIH publication”*

With regard to claims 20 and 21, Appellants contend that “the claimed product is novel and non-obvious for the reasons given above, and its use to treat dry mouth is likewise non-obvious” (App. Br. 24). Appellants contend that:

To demonstrate that the present invention provides a treatment for xerostomia that can be distinguished from the relief provided by sucking on a generic candy, Appellants previously provided marketing data and analysis in the form of a Declaration by Donald Mayer (Exh. E-5). It is believed that consumer reaction to the product registered an unusual awareness on the part of consumers of the product functionality as a treatment of dry mouth, as opposed to merely registering consumer satisfaction, for example.

(App. Br. 24.)

We are not persuaded. As Appellants acknowledge, “[i]t was known in the prior art that sucking on a lozenge might provide some relief from xerostomia” (App. Br. 23). Appellants acknowledge that the “NIH publication (which was first cited by the Appellants to demonstrate to the

Examiner that dry mouth is, in fact, a recognized indication that can be distinguished from throat irritation generally), simply reflects what was stated in the specification” (App. Br. 23).

Thus, we agree with the Examiner that given the knowledge that confectionary products provide relief from xerostomia, the ordinary artisan “would have been motivated to do so since Bealin-Kelly teaches a sugarless confectionary product containing citrus flavors and menthol and the NIH publication teaches sucking on sugarless candies, particularly ones that contains citrus and mint, treat xerostomia” (Ans. 12).

We have considered the Mayer Declaration and the associated consumer comments, but Appellants do not appear to suggest that the results of the claimed confectionary product are unexpected relative to the prior art. *See In re Klosak*, 455 F.2d 1077, 1080 (CCPA 1972) (Appellants bear the initial burden of showing that the claimed invention imparts unexpected results). Even if there were such a suggestion, Appellants have not compared the confectionary product to the product of Bealin-Kelly or Cherukuri, the closest prior art. *See In re Baxter Travenol Labs.*, 952 F.2d 388, 392 (Fed. Cir. 1991) (“[W]hen unexpected results are used as evidence of nonobviousness, the results must be shown to be unexpected compared with the closest prior art.”).

*F. 35 U.S.C. § 103(a) over Bealin-Kelly, Hanke, and Klacik*

The Examiner finds that a skilled artisan would have been motivated to use a mold “since Klacik et al teach an economical and simple process of producing a product having distinct regions using a mold having a ridge.

Therefore, it is obvious to utilize a ridge to further maintain the separation and distinction of each respective region” (Ans. 13).

The Examiner provides sound fact-based reasoning for combining Bealin-Kelly, Hanke, and Klacik. As Appellants do not identify any material defect in the Examiner's reasoning, and only argue the underlying rejection of Bealin-Kelly and Hanke which we affirmed above, we affirm this rejection for the reasons stated by the Examiner.

## SUMMARY

In summary, we affirm the rejection of claims 1 and 17 under 35 U.S.C. § 103(a) as obvious over Cherukuri and Le. Pursuant to 37 C.F.R. § 41.37(c)(1)(vii)(2006), we also affirm the rejection of claims 2-5, 7, 8, 10, 11, 13, 14, 20, 23, 24, and 29-32, as these claims were not argued separately.

We affirm the rejection of claims 18 and 19 under 35 U.S.C. § 103(a) as obvious over Cherukuri, Le, and Aldrich.

We affirm the rejection of claims 15, 16, 21, and 28 under 35 U.S.C. § 103(a) as obvious over Cherukuri, Le, and Hughes.

We affirm the rejection of claim 1 under 35 U.S.C. § 103(a) as obvious over Bealin-Kelly and Hanke. Pursuant to 37 C.F.R. § 41.37(c)(1)(vii)(2006), we also affirm the rejection of claims 2-5, 7, 8, 13-18, 23, 29, and 31, as these claims were not argued separately.

We affirm the rejection of claims 20 and 21 under 35 U.S.C. § 103(a) as obvious over Bealin-Kelly, Hanke, and “NIH publication.”

We affirm the rejection of claim 19 under 35 U.S.C. § 103(a) as obvious over Bealin-Kelly, Hanke, and Klacik.

Appeal 2010-001498  
Application 09/825,992

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv)(2006).

AFFIRMED

cdc

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